Ontario

Ministry of
Northern Affairs
and Mines

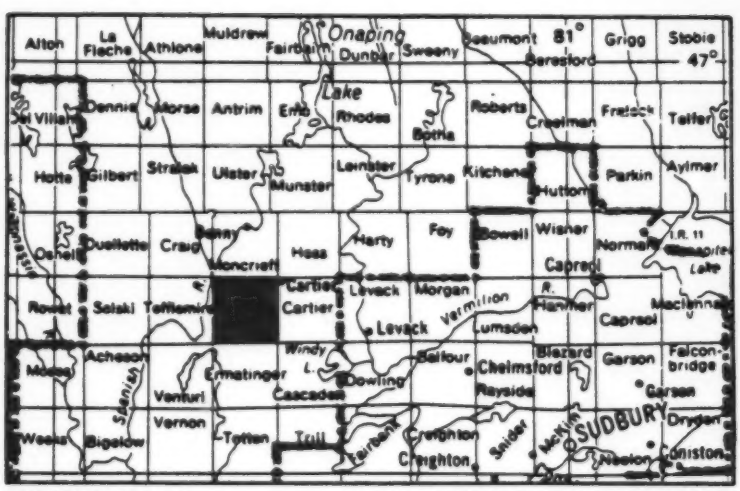
ONTARIO GEOLOGICAL SURVEY
GEOLOGICAL DATA INVENTORY FOLIO

GDIF 245

HART TOWNSHIP

DISTRICT OF SUDBURY

Compiled by the staff of
the Resident Geologist's Office
Sudbury



LOCATION MAP

Scale 1:1 013 760 or 1 inch to 16 miles

86-0841/

NTS Number 41 I/12

Mining Claim Map Number M.919

STATEMENT: This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey
1985: Hart Township, District of Sudbury; Ontario Geological Survey, Geological Data Inventory Folio 245, compiled by the staff of the Resident Geologist's Office, Sudbury, 22p. and 2 maps.

Original Compilation by: MacNeil, Ronald James, Feb.28, 1985

Date	Page Revised	Revised by

Date	Page Revised	Revised by

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ACCOMPANYING MAPS

Property Location Map - 1 Map

Exploration Data Map - 1 Map

Map Scale 1: 31 680 or 1 inch to ½ mile

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	**1.609 344**	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	**907.184 74**	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

DATA SOURCES CHECK LIST

NOTE: The following sources have been searched to compile the data for this area. If no reference data was found the appropriate box is marked 'no'; if reference data was found, the box is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

	SOURCES OF DATA	Data	Initial
1	Resident Geologist's Office Files	Yes	R.M.
2	Assessment Files Research Office, Toronto	N.A.	R.M.
3	ODM General Index; 9 Volumes	Yes	R.M.
4	Catalogue of Airborne Geophysical Surveys (ODM)	No	R.M.
5	ODM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	R.M.
6	ODM Industrial Mineral Reports	No	R.M.
7	Bibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	R.M.
8	Bibliography of Precambrian Theses - Ginn (ODM MP 2)	Yes	R.M.
9	Newspaper Clippings File	Yes	R.M.
10	GSC Index to Publications	No	R.M.
11	OGS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	R.M.
12	OGS Index Maps	Yes	R.M.
13	Source Mineral Deposit Records (O.G.S.) Mineral Occurrences File	Yes	R.M.
14	Author - Subject Articles File	Yes	R.M.
15	Miscellaneous Papers: ODM & OGS	Yes	R.M.
16	ODM Geological Circulars: OGS Study Series , Reports	Yes	R.M.
17	ODM Preliminary Reports: ODM Bulletins	No	R.M.
18	ODM – OGS Open File Reports	Yes	R.M.
19	OGS Northern Ontario Engineering Geology Terrain Studies	Yes	R.M.
20	OGS Aggregate Resources Inventory Papers	No	R.M.
21	OGS Mineral Potential Maps	Yes	R.M.
22	Theses on File, Sudbury	Yes	R.M.
23	Aerial Photographs on File, Sudbury	Yes	R.M.

METALS AND MINERALS REFERENCES LIST

△ anh. . . . . .Anhydrite
△ ank. . . . . .Ankerite
△ anna . . . . . Annabergite
△ ap. . . . . .Apatite
△ arg . . . . . Argentite
△ As . . . . . .Arsenic
△ asp . . . . . .Arsenopyrite
△ asb . . . . . .Asbestos
△ ba. . . . . .Barite
△ be. . . . . .Beryl
▲ Bi. . . . . .Bismuth
△ bn . . . . . .Bornite
△ bran . . . . . .Brannerite
△ bruc . . . . . .Brucite
△ Cd . . . . . .Cadmium
△ calc. . . . . .Calcite
△ carb . . . . . .Carbonate
△ cel . . . . . .Celestite
△ cc. . . . . .Chalcocite
▲ cp. . . . . .Chalcopyrite
△ ch. . . . . .Chert
△ clay . . . . . .Clay
▲ Co . . . . . .Cobalt
△ cob. . . . . .Cobaltite
△ cb. . . . . .Columbite
△ Cu . . . . . .Copper
△ cor . . . . . .Corundum
△ dol . . . . . .Dolomite
△ ep. . . . . .Epidote
△ ery . . . . . .Erythrite
△ fel . . . . . .Feldspar
△ fl . . . . . .Fluorite (flurospar)
△ fu. . . . . .Fuchsite
▲ gn. . . . . .Galena
△ gt . . . . . .Garnet
△ goe . . . . . .Gosthite
▲ Au . . . . . .Gold
△ gf . . . . . .Graphite
△ gl . . . . . .Gravel
△ gyp. . . . . .Gypsum
△ hem . . . . . .Hematite
△ il . . . . . .Ilmenite
▲ Fe . . . . . .Iron
△ IF. . . . . .Iron Formation
△ jas . . . . . .Jasper
△ kaol . . . . . .Kaolinite (kaolin)
△ ky . . . . . .Kyanite
△ Pb . . . . . .Lead
△ lim . . . . . .Limonite
△ Li. . . . . .Lithium
△ mgst . . . . . .Magnesite
▲ mag . . . . . .Magnetite
△ mc . . . . . .Malachite
△ Mn . . . . . .Manganese
△ mb . . . . . .Marble
△ mar. . . . . .Marcasite
△ ma . . . . . .Marl
△ mi . . . . . .Mica
△ ml . . . . . .Millerite
△ mo . . . . . .Molybdenite
△ Mo . . . . . .Molybdenum
△ mon . . . . . .Monazite
△ ne. . . . . .Nephelite (nepheline)
△ nc. . . . . .Niccolite
▲ Ni. . . . . .Nickel
△ Nb . . . . . .Niobium
△ Pd . . . . . .Palladium
△ peat . . . . . .Peat
△ pent . . . . . .Pentlandite
△ Pt. . . . . .Platinum
▲ py . . . . . .Pyrite
△ pyl . . . . . .Pyrochlore
△ pyrl . . . . . .Pyrolusite
△ po . . . . . .Pyrrhotite
△ q . . . . . .Quartz
△ qcv . . . . .Quartz carbonate vein
△ ra. . . . . .Radioactive minerals
△ RE . . . . . .Rare Earths
△ sd. . . . . .Sand
△ sgl . . . . . .Sand and gravel
△ ss . . . . . .Sandstone
△ scap . . . . . .Scapolite
△ shee . . . . . .Scheelite
△ serp . . . . . .Serpentine
△ sh. . . . . .Shale
△ sid . . . . . .Siderite
△ si . . . . . .Silica
▲ Ag . . . . . .Silver
△ sl . . . . . .Slate
△ sm . . . . . .Smaltite
△ sod . . . . . .Sodalite
△ spec . . . . . .Specularite
▲ sp. . . . . .Sphalerite
△ spd . . . . . .Spodumene
△ staur . . . . . .Staurolite
△ stib. . . . . .Stibnite
△ st . . . . . .Stone
△ talc. . . . . .Talc
△ Te . . . . . .Tellurium
△ td. . . . . .Tetrahedrite
△ th. . . . . .Thorite
△ Th . . . . . .Thorium
△ thuc . . . . . .Thucholite
△ ti . . . . . .Titanite
△ Ti. . . . . .Titanium
△ tour . . . . . .Tourmaline
△ trap . . . . . .Trap rock
△ W. . . . . .Tungsten
△ uran . . . . . .Uraninite
△ U . . . . . .Uranium
△ verm . . . . . .Vermiculite
△ Y . . . . . .Yttrium
△ Zn . . . . . .Zinc
△ zr. . . . . .Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Groves Claims Lot 7, Con.3	mag	Fe 2	-	O.D.M. Lindeman, M. E., 1917 Iron Ore Occurrences in Canada; pub. No.217, Vol.2, p.101 O.D.M. Report of Iron Ore Committee, 1923, p.208
B	Hart Township Occurrence (Iron Mask Cobalt Silver M. L. (Historical Name) Lot 6,7, Con.5	Co,Pb,Zn, Ni,Au,Bi, Cu,Ag,gn, sp,cp,py	Co 1	MRC10, p.55	Osborne, F. F., 1929 O.D.M. AR Vol.38, pt.7, pp.65,66 Osborne, F. F., 1929 J. of Econ. Geol., Vol.24, pp.722-723 O.D.M. AR Vol.40, pt.1, p.17
C	Hart Township Occurrence Lots 7,8, Con.5	Fe,mag	-	MRC11, p.338	O.D.M. MRC11, p.338 O.D.M. Vol.38, pt.7, p.66 Maps P.287, 38h
D	Moore & Johns Claims Lots 6,7, Con.1,2	Fe,mag	Fe 1	-	O.D.M. Report of the Ontario Iron Ore Committee, 1923; p.208

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY	COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	ORE SHIPMENT		
1	B. P. Minerals Ltd.	76 79	75											77						
2	Chauvin, C. R.			77																
3	Hollinger Mines Ltd.											77								
4	Falconbridge Nickel Ltd.				56 57 58 61															
5	Jarvin Magnetite Syndicate	73		73																
6	Lacelle, A.				61 62 68 69															
7	Landry, A.			71																
8	Mogul Mining Corporation Ltd. (Consolidated Mogul Mines Ltd. 1958)			55	55	55														

GDIF FORM NO. 2

HART TOWNSHIP

TYPE OF WORK

Numbers below represent the year in which the work was done; e.g., 68 for 1968.

EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	ORE SHIPMENT		
	COMPANY/AUTHOR (file number)																			
9	Salem Exploration Ltd. (Nickel Hill Syndicate Ltd., Iron Mask Cobalt Silver Mines Ltd.)			20's[3] 29	30[1] 65[1]	29 -30 65							65[1]					29[2] 30[3]		

1 No data
2 1 Ton
3 5 Tons

GDIF FORM NO. 2

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for
1	Falconbridge Nickel	HXC-1	1956	N	40	0	58	-	
1a		HXC-2	1956	N	45	0	69	-	-
1b		HXC-3	1956	N	50	0	71	-	-
1c		HXC-4	1956	-	90	0	242	-	-
1d		HXC-1	1957	N60W	43	0	273	py	-
1e		HXC-2	1957	N60W	60	0	167	py	-
1f		HXC-1	1958	N70E	42	0	133	-	-
1g		HXC-2	1958	N70E	?	0	747' Total - holes 2-9		-
1h		HXC-3	1958	N70E	?	0			
1i		HXC-4	1958	N70E	?	0			
1j		HXC-5	1958	N70E	?	0			
1k		HXC-6	1958	N70E	?	0			
1l		HXC-7	1958	N70E	?	0			
1m		HXC-8	1958	N70E	?	0			
1n		HXC-9	1958	N70E	?	0			
2		HXC-1	1961	-	90	0	440	py	-
3	Lacelle, A.	H1	1961	-	90	0	157	py	-
4		H2	1961	-	90	0	165	py	-
5		H3	1961	-	90	0	166	-	-
6		H5	1961	-	90	0	165	py	-
7		H5	1962	-	90	0	165	py	
8		H4	1962	-	90	0	166	py,Fe	-
8a		H6	1962	?	60	0	165	py,Fe	-
9		1	1968	-	90	0	212	py	-
9a		2	1968	?	65	0	165	py	-
10		3	1969	?	45	0	132	py	-
11		3	1968	-	90	0	208	-	-
12	Mogul Mining Corp.	A4	1955	N	43	8	768	py,po	-
12a		1	1955	129	43	14	200	-	-
12b		2	1955	129	43	19	313	-	-
12c		3	1955	129	43	12	135	-	Fe
12d		4	1955	129	43	30	144	-	Cu,Co,Fe
12e		5	1955	109	43	9	123.8	-	

GDIF FORM NO. 3

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
13	Mogul Mining Corp.	6	1955	129	43	4	182	-	Zn,Cu,Pb
13a		7	1955	129	43	13	196.5	-	Zn,Cu
13b		8	1955	129	43	13	227	-	-
13c		9	1955	129	43	8	184	-	Zn,Pb,Ag
13d		10	1955	129	43	21	213	-	-
13e		11	1955	129	43	20	164	-	-
14		12	1955	090	43	10	202	-	-
15	Salem Explorations	4 holes	1965	No Data					
15a	(Nickel Hill Syndicate)	?	1930	Drilled	2000'.	No Data			

GDIF FORM NO. 3

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

GDIF FORM NO. 4

HART TOWNSHIP

GEOCHEMICAL SURVEY DATA

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference
1	Rock Chip	U,Th,Cu,Pb,Fe,Zn	B. P. Minerals Ltd.	File 0013

GDIF FORM NO. 5

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result

GDIF FORM NO.5

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office. SUDBURY

Salem Exploration Co. Ltd.

Northern Miner Sept.2, 1965

ODM GENERAL INDEX SEARCH

Words searched:

ALCOURT MINES	GOLD	MAGNETITE
BALBOA EXPLORATIONS	GOWGANDA FORMATION	NICKEL
BENNY	HART TOWNSHIP	ZINC
BISMUTH	HOLLINGER MINES	
COBALT	IRON	
COPPER	LEAD	
ESPANOLA FORMATION	LORRAIN FORMATION	

Index Volume	Listing:	Report Volume	Part	Page
6	ALCOURT MINES LTD.			
	Incorporated	66	1	31
7	ALCOURT MINES LTD.			
	Uranium claims, report on	GR1		20,21
	sketch map with	GR1		
4	BALBOA EXPLORATIONS, LTD.			
	Incorporated	54	1	49
8	BENNY AREA, Sudbury Dist.			
	Summary of Field work, 1973			
	by K. D. Card & D. G. Innes	MP56		111-117
	Summary of Field work, 1974			
	by K. D. Card & D. G. Innes	MP59		132-138
8	BISMUTH			
	Ontario	ASR2		70
9	BISMUTH			
	Ontario	ASR4		20,39
		ASR5		68,78
		ASR6		103,113
		ASR7		78,115
1	COBALT SERIES			
	Gowganda reg.,	19	2	45,174-176
		22	2	132
7	COBALT			
	Ontario deposits, notes on	GC13		88
8	COBALT			
	Ontario	ASR1		5
		ASR2		9
		ASR3		8
	Sudbury area, Sudbury Dist.	MP17		78
		MP34		22
2	COBALT SERIES			
	Northern Ont. veins in	31	2	8,333, 335

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
3	COBALT SERIES			
	See also Gowganda formation			
	Upper Huronian			
	Cartier-Stralak area	38	7	58
2	COPPER PYRITES (Chalcopyrite)			
	Sudbury nickel reg.	N.C.		R114
		34	8	18
3	COPPER			
	Cartier-Stralak area	38	7	64-67
	Sudbury area, deposits	38	3	37-47
		43	2	41-44
7	COPPER			
	Ontario deposits, notes on	GC13		91-93
8	COPPER			
	Sudbury area, Sudbury Dist.	MP17		77,78
		MP34		22
2	ESPANOLA GREYWACKE and LIMESTONE			
	Ontario northern,	31	2	350
3	ESPANOLA FORMATION			
	Cartier-Stralak area	38	7	58
	lead-zinc ores in	38	7	66
8	ESPANOLA FORMATION			
	quarry			
	Benny area, Sudbury Dist.	MP60		174
1	GOLD			
	Ontario			
	in Huronian	R.C.		25-29
	Sudbury			
	Huronian areas	9		141
3	GOLD			
	Sudbury dist.			
	Cartier-Stralak area	38	7	63,64
3	GOWGANDA FORMATION			
	Cartier-Stralak area	38	7	58

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
2	HART TP., Sud.			
	Iron claims, exploratory work,	IO.		208
3	HART TP., Sud.			
	Cobaltite, analysis	38	7	66
	Mineral deposits	38	7	65,66
8	HART TP., Sudbury Dist.			
	cobalt	MRC10		55
	cobalt/lead/zinc/nickel	MRC12		247-248
	iron	MRC11		338
9	HART TP., Sudbury Dist.			
	erythrite	MP70		142
9	HOLLINGER MINES			
	Benny area, Sudbury Dist.	MP78		96
1	IRON AND IRON MINING			
	Ontario			
	Huronian areas,	R.C.		20-23
	Notes by Bell,	AR1		87,88
	Coleman,	AR10		181-212
	Sudbury, near	R.C.		59
8	IRON			
	Benny area, Sudbury Dist.	MP56		115-116
1	LEAD			
	Sudbury nickel, reg.,	R.C.		1,91,92, 233
		12		282
		14	3	95,161
		25	2	17
	associated with iron,	R.C.		59
3	LEAD			
	Cartier-Stralak area	38	7	61-66
7	LEAD			
	Ontario deposits, notes on	GC13		93

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:	Report Volume	Part	Page
8	LEAD			
	Ontario	ASR1		5,6,45-46
		ASR2		10,93-95
		ASR3		9,110-112
8	LEAD-ZINC			
	Benny area, Sudbury Dist.	MP59		133,136,137
3	LORRAIN QUARTZITE FORMATION			
	Cartier-Stralak area	38	7	54,59
1	MAGNETITE			
	Algoma dist.:			
	Cartier, near	1		87
3	MAGNETITE			
	Cartier-Stralak area	38	7	66,67
8	NICKEL			
	Sudbury area, Sudbury Dist.	MP17		76-78
		MP34		22
		MP46		136
3	ZINC			
	Cartier-Stralak area	38	7	61-66

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL GEOLOGICAL COMPILATION MAPS		
Card, K. D.	1975	Cartier Sheet, District of Sudbury and Algoma	O.D.M. Map P.287	1"=2 miles
Card, K. D., Innes, D. G.	1976	Benny Area, Hess Lake Sheet	O.D.M. Map P.949	1"=¼ mile
	1974	Benny Area, Spanish-Johnson Lake Sheet, District of Sudbury	O.D.M. Map 1110	1"=¼ mile
	1980	Blue Water Lake, Sudbury District	O.G.S. Map 2434	1"=½ mile
	1980	Geneva Lake, Sudbury District	O.G.S. Map 2435	1"=½ mile
Dressler, B.O.	1984	Sudbury Geological Compilation	O.G.S. Map P.2491	1:50,000
O.G.S.	1975	Nickel Deposits of Ontario, East Central Sheet, Districts of Thunder Bay, Algoma, Cochrane, Sudbury, Timiskaming and Nipissing	Map P.1062	1"=16 miles
	1974-75	Sudbury-Cobalt Geological Compilation Series	O.G.S. Map 2361	1"=4 miles
O.M.N.R.	1981	Benny Area Report	Chart B Fig.18-19	1"=1 mile
		GEOPHYSICAL MAPS		
		Aeromagnetic Maps		
G.S.C.	1965	Cartier, Ontario	Map 1524G	1"=1 mile
	1965	Sudbury, Ontario	Map 7067G	1"=4 miles

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
O.G.S.-G.S.C.	1978	Uranium Reconnaissance Program Airborne Gamma-Ray Spectrometer Survey	O.G.S. Map P.1610	1:250,000
		SURFICIAL, PLEISTOCENE, TERRAIN ENGINEERING		
Gartner, J. E.	1978	N.O.E.G.T. Study No.94 Cartier N.O.E.G.T.S. Data Base Map Cartier Area	Map 5000	1:100,000
D.E.M.R. Surveys and Mapping Branch	1969	Cartier (Topographic Map)		1:50,000
		MINERAL POTENTIAL MAPS		
Springer, J.	1977	Ontario Mineral Potential, Northern Part of Sudbury Sheet and Part of North Bay Sheet, District of Sudbury and Manitoulin	O.G.S. Map P.1512	1:250,000
	1978	Ontario Mineral Potential, Southern Part of the Sudbury Sheet, District of Algoma, Nipissing, Sudbury, Parry Sound, and Manitoulin	O.G.S. Map P.1511	1:250,000
		GEOLOGICAL REPORTS AND MAPS		
Adlington, R.	1980	Hart Township, Sudbury Data Series	O.G.S. Map P.2145	1"=½ mile
Donovan, J. F.	1968	Annual Report of Resident Geologists' Section, Geological Branch. Part 2 Sudbury Branch	MP17	p.76-78
Card, K. D., Innes, D. G.	1981	Geology of the Benny Area, District of Sudbury	GR206 Chart A	1"=1 mile
Choudry, A. G.	1984	Geology of Hart, Ermatinger and Totten Townships	OFR5525 Map 2599	1:15840

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Guillet, G. R.	1970	Annual Report of Resident Geologists' Section Geological Branch	MP46	p.136
Hewitt, D. F., Freeman, E. B.	1970	Rocks and Minerals of Ontario (Revised)	O.D.M.N.A.C.13	p.88,91-93
Innes, D. G.	1970	Annual Report of Resident Geologists' Section Geological Branch Part 2 Sudbury District	MP24	p.22
Kustra, C. R.	1978	Annual Report of the Regional and Resident Geologist	MP78	p.96
Matten, E. F.	1968	Annual Statistical Report on the Mineral Production of Ontario	O.D.M. ASR1	p.56,45,46
	1969	Annual Statistical Report on the Mineral Production of Ontario	O.D.M. ASR2	p.10,93-95
	1970	Annual Statistical Report on the Mineral Production of Ontario	O.D.M. ASR3	p.9,110-112
	1971-73	Annual Statistical Report on the Mineral Production of Ontario	O.D.M. ASR4 O.D.M. ASR5	p.20,39 p.68,78
	1974	Annual Statistical Report on the Mineral Production of Ontario	O.D.M. ASR6 O.D.M. ASR7	p.103,113 p.78,115
Milne, V. G., Hewitt, D. F., Wolfe, W. J.	1973	Summary of Field Work, by the Geological Branch	MP46	p.111-117
Milne, V. G., Hewitt, D. F., Card, K. D.	1974	Summary of Field Work, by the Geological Branch	MP59	p.132-138

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
O.D.M.	1924	Report of the Ontario Iron Ore Committee	O.D.M. I.O.	p.208
Pye, E. G.	1974	Annual Report of the Regional/Resident Geologist	MP60	p.154
Robertson, J. A., Ferguson, S. A.	1957	Copper, Nickel, Lead and Zinc Deposits in Ontario	O.D.M. MC2	p.103
Royal Ontario Nickel Commission	1917	Report and Appendix	R.C.	p.1,25-29,59. 91,92,233
Satterly, J.	1977	A Catalogue of the Ontario Localities Represented by the Minerals Collection of the Royal Ontario Museum	MP70	p.142
Sergiades, A. O.	1968	Silver Cobalt Calcite Vein Deposits of Ontario	O.D.M. AC10	p.55
Shklanka, R.	1968	Iron Deposits of Ontario	MRC11	p.338
	1968	Copper, Nickel, Lead and Zinc Deposits of Ontario	MRC12	p.247-248
Thomson, J. E.	1960	Uranium and Thorium Deposits at the Base of the Huronian System in the District of Sudbury	GR1 Map Chart A	p.20-21 1"=6 miles
Vos, M. A., Smith, B. A., Stevenato, R. J.	198k	Industrial Minerals of the Sudbury Area	OFR5329	p.138 Fig.3-9
		JOURNAL ARTICLES, THESES, TECHNICAL REPORTS		
Holmes, T. C.	1936	The Geology of Hart Township, Ontario, and adjacent Areas. Ph.D., UC.	MP2	p.25
Hixon, H. W.	1904	Geology of the Sudbury District	The Eng. and Mining J.	p.1022-1023

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Osborne, E. E.	1929	A Diabase Contact Metamorphic Deposit in Ontario	J. Econ. Geol., Vol.24	pp.722-723

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

GDIF FORM NO. 9

NOTES AND ADDENDA

Index of Aerial Photographs

Scale 1"=¼ mile

Year	Roll	Line	Number
1973	14	4630	240-249
	14	4629	106-114
	21	4628	143-152
	23	4627	149-157
	19	4626	222-228

GDIF FORM NO.10

MONCRIEFF TOWNSHIP

TOFFLEMIRE TOWNSHIP

CARTIER TOWNSHIP

Spanish Lake Creek

Geneva Creek

Creek

46°43' 00"

81°35' 00"

3

2,5,7

5

8,9

1

1

6

6

4

6

4

Ministry of Northern Affairs and Mines

Ontario

René Fontaine
Minister

David Hobbs
Deputy Minister

ONTARIO GEOLOGICAL SURVEY

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 245

(Map **1** of **2**)

HART TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

Mile 0.5 0 0.5 1 Mile

Kilometre 0.5 0 0.5 1 Kilometre

PROPERTY LOCATION MAP

GEOLOGICAL DATA INVENTORY FOLIO 245

(Map 1 of 2)

HART TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

Mile 0.5 0 0.5 1 Mile

Kilometre 0.5 0 0.5 1 Kilometre

TOFFLEMIRE TOWNSHIP

CARTIER TOWNSHIP

ERMATINGER TOWNSHIP

Geneva Creek

Centre

Pumphouse

46° 38' 00"

81° 41' 00"

EXPLORATION DATA FILE AREAS

Reference number is always inside work area outlined. See listing in text pages.

Small area of exploration.

TYPES OF DATA SHOWN ON THIS MAP

GEOCHEMICAL AND GEOCHRONOLOGICAL DATA

- Geochemical sample site, with reference number
- Area of geochemical sampling, with reference number
- Age dating material sampling site, with reference number

GEOPHYSICAL ANOMALIES

- Airborne Magnetometer Anomaly
- Airborne Electromagnetometer Anomaly Length of anomaly along flight line
- Airborne Electromagnetometer Anomaly. Location of anomaly along flight line
- Airborne Electromagnetometer Anomaly Conductor Axis: definite, probable, possible
- Airborne Radiometric Anomaly
- Ground Magnetometer Anomaly
- Ground Electromagnetometer Anomaly (VL - Vertical Loop; HL - Horizontal Loop; VLF - Very low freq; Turam; JEM - Crone EM - 16)
- Ground Radiometric Anomaly
- Induced Polarization Anomaly
- Self Potential Anomaly
- Audio-frequency magnetometer anomaly (total intensity)
- Resistivity Anomaly
- Gravity Anomaly

MISCELLANEOUS DATA

- Trenching, pit
- Adit
- Rock quarry
- Sand and/or gravel pit

MONCRIEFF TOWNSHIP

TOFFLEMIRE TOWNSHIP

CARTIER TOWNSHIP

Sponish Lake

Geneva Creek

Creek

46° 43' 00"

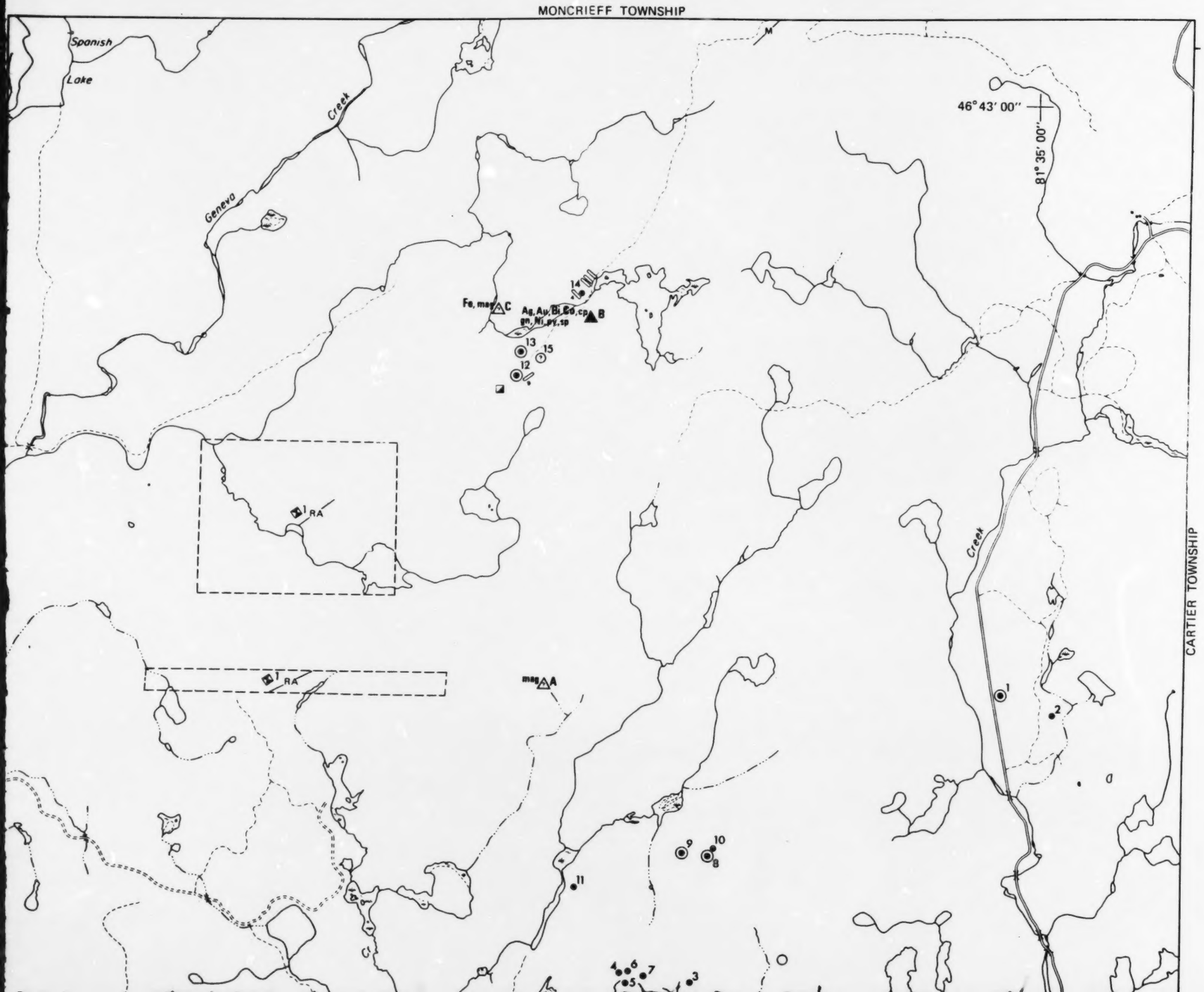
81° 35' 00"

Fe, mag

Ag, Au, Bi, Co, cp, gn, Ni, py, sp

RA

mag



Ontario

Ministry of Northern Affairs and Mines

René Fontaine
Minister
David Hobbs
Deputy Minister

ONTARIO GEOLOGICAL SURVEY

EXPLORATION DATA MAP

GEOLOGICAL DATA INVENTORY FOLIO 245

(Map **2** of **2**)

HART TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

Mile 0.5 0 0.5 1 Mile

Kilometre 0.5 0 0.5 1 Kilometre

GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- Ag ? A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized Float with reference letter

DRILL HOLES

- 2 — Location of single drill hole, with reference number

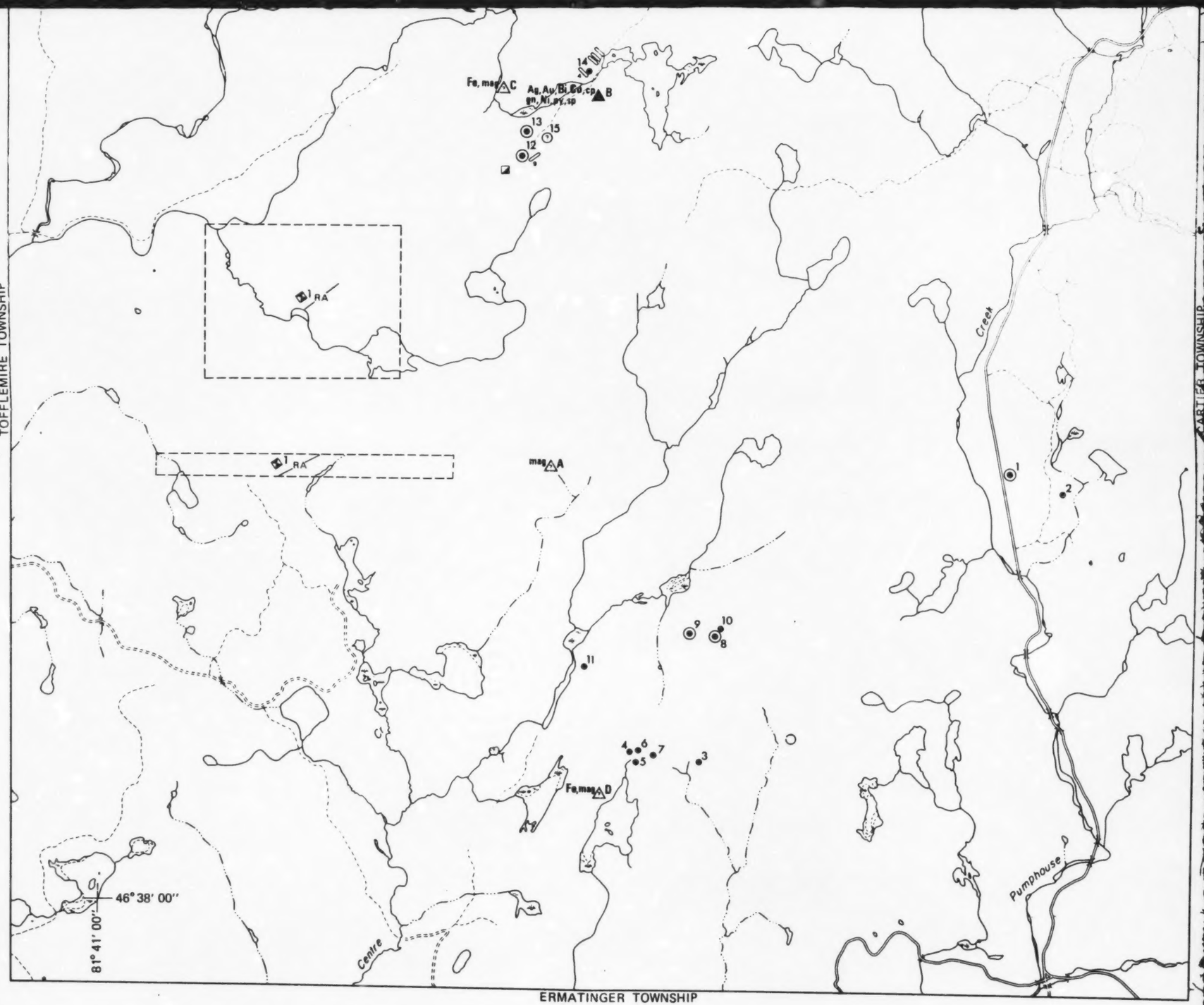
GEOPHYSICAL ANOMALIES

- ☐ AM — Airborne Magnetometer Anomaly
- ☐ Airborne Electromagnetometer Anomaly
  Length of anomaly along flight line
- ☐ Airborne Electromagnetometer Anomaly.
  Location of anomaly along flight line
- ☐ Airborne Electromagnetometer Anomaly
  Conductor Axis: definite, probable, possible
- ☐ ARA — Airborne Radiometric Anomaly
- ■ M — Ground Magnetometer Anomaly
- ☐ VL — Ground Electromagnetometer Anomaly
  (VL - Vertical Loop; HL - Horizontal Loop;
  VLF - Very low freq; Turam; JEM -
  Crone EM - 16)
- ■ RA — Ground Radiometric Anomaly
- ☐ IP — Induced Polarization Anomaly
- ☐ SP — Self Potential Anomaly
- ☐ AFMAG — Audio-frequency magnetometer anomaly
  (total intensity)
- ☐ R — Resistivity Anomaly
- ☐ GR — Gravity Anomaly
- ☐

MISCELLANEOUS DATA

- ■ Trenching, pit
- ☐ Adit
- ☐ Open pit
- ☐
- ☐ Rock quarry
- ☐ Sand and/or gravel pit
- ■ Shaft

NOTE: Consult the text that accompanies this map for pertinent lists of data, references, and abbreviations.



GEOLOGICAL DATA INVENTORY FOLIO 245

(Map 2 of 2)

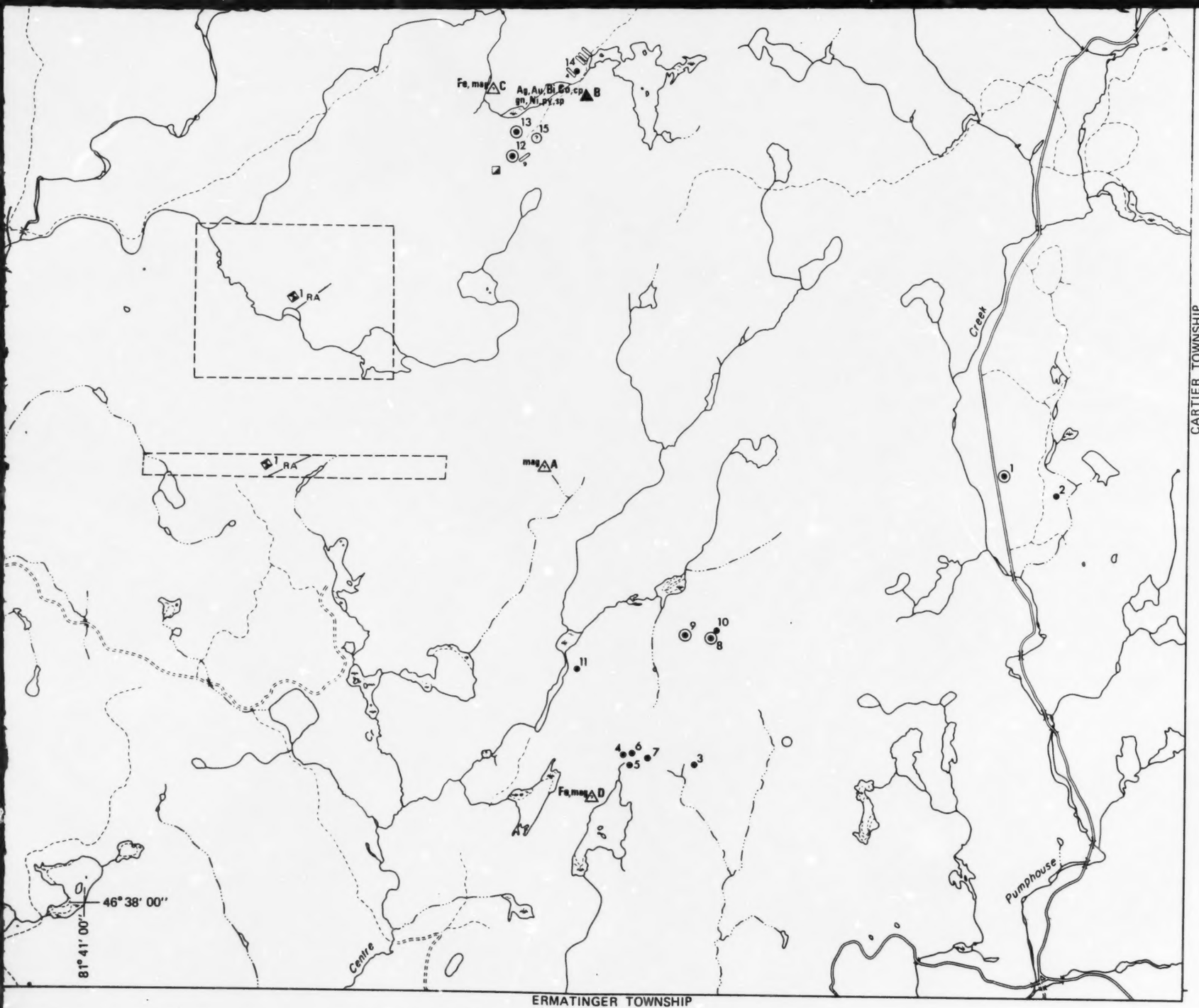
HART TOWNSHIP

DISTRICT OF SUDBURY

Scale 1:31 680

Mile 0.5 0 0.5 1 Mile

Kilometre 0.5 0 0.5 1 Kilometre



GEOLOGICAL AND MINING SYMBOLS

TYPES OF DATA SHOWN ON THIS MAP

MINERAL OCCURRENCES

- cp A. — Mineral occurrence at surface, with reference letter
- Au A. 84' — Mineral occurrence with shaft, depth given with reference letter
- Ag (?) A. — Mineral occurrence reported but exact location uncertain, with reference letter
- cp A. — Mineralized Float with reference letter

DRILL HOLES

- 2 — Location of single drill hole, with reference number
- 2 — Location of closely spaced group of drill holes, with reference number
- (?) 2 — Drill hole, exact location uncertain, with reference number.
- Property with underground drill holes in this general area, with reference number
- 2 — Property with drill holes which have not been plotted on map, with reference number
- ⊕ 2 — Reverse Circulation Drill Hole; Churn drilling, with reference number